AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-68 (Cancelled)

69. (New) An optical cable comprising at least one tubular element of polymeric material and at least one transmission element housed within said tubular element, wherein said polymeric material is made from a polymeric composition comprising:

(a) at least one olefin polymer;

(b) at least one inorganic filler; and

(c) at least one olefin polymer including at least one functional group;

wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 3 parts by weight to about 10 parts by weight with respect to 100 parts by weight of the olefin polymer (a),

wherein said at least one tubular element is a buffer tube housing said at least one transmission element, and

wherein said buffer tube is defined by a peripheral wall having a thickness lower than about 0.2 mm.

70. (New) The optical cable according to claim 69, wherein said buffer tube is defined by a peripheral wall having a thickness down to about 0.1 mm.

71. (New) The optical cable according to claim 69, wherein said polymeric material has an ultimate tensile strength lower than about 12 MPa.

72. (New) The optical cable according to claim 69, wherein said polymeric material has an elongation at break lower than about 100%.

73. (New) The optical cable according to claim 69, wherein the olefin polymer (a) is selected from semi-crystalline and crystalline α-olefin polymers including homopolymers, copolymers, terpolymers, and mixtures thereof, containing one or more monomeric units.

74. (New) The optical cable according to claim 69, wherein the inorganic filler (b) is selected from hydroxides, hydrated oxides, salts and hydrated salts of metals, and mixtures thereof.

75. (New) The optical cable according to claims 69, wherein the olefin polymer including at least one functional group (c) is selected from:

(c_1) at least one terpolymer of at least one α-olefin, at least one acrylic acid ester, and at least one α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives, anhydrides, metal salts, imides, esters, or at least one glycidyl acrylate;

(c_2) at least one terpolymer of ethylene, at least one α,β-olefinically unsaturated dicarboxylic acid anhydride, and at least one vinyl ester of a saturated carboxylic acid; and

(c_3) at least one olefin polymer grafted with at least one ethylenically unsaturated monomer.

76. (New) An optical cable comprising at least one tubular element of polymeric material and at least one transmission element housed within said tubular element, wherein said polymeric material is made from a polymeric composition comprising:

(a) at least one olefin polymer;

(b) at least one inorganic filler; and

(c) at least one olefin polymer including at least one functional group;

wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 3 parts by weight to about 10 parts by weight with respect to 100 parts by weight of the olefin polymer (a), and

wherein said polymeric material has an ultimate tensile strength lower than about 12 MPa.

77. (New) The optical cable according to claim 76, wherein said tubular element is a buffer tube housing said at least one transmission element and wherein said buffer tube is defined by a peripheral wall having a thickness lower than about 0.5 mm.

78. (New) The optical cable according to claim 76, wherein said polymeric material has an ultimate tensile strength of about 5 MPa to about 10 MPa.

79. (New) The optical cable according to claim 76, wherein said polymeric material has an elongation at break lower than about 100%.

80. (New) The optical cable according to claim 76, wherein the olefin polymer (a) is selected from semi-crystalline and crystalline α-olefin polymers including homopolymers, copolymers, terpolymers, and mixtures thereof, containing one or more monomeric units.

81. (New) The optical cable according to claim 76, wherein the inorganic filler (b) is selected from hydroxides, hydrated oxides, salts and hydrated salts of metals, and mixtures thereof.

82. (New) The optical cable according to claims 76, wherein the olefin polymer including at least one functional group (c) is selected from:

(c_1) at least one terpolymer of at least one α-olefin, at least one acrylic acid ester, and at least one α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives, anhydrides, metal salts, imides, esters, or at least one glycidyl acrylate;

(c_2) at least one terpolymer of ethylene, at least one α,β-olefinically unsaturated dicarboxylic acid anhydride, and at least one vinyl ester of a saturated carboxylic acid; and

(c_3) at least one olefin polymer grafted with at least one ethylenically unsaturated monomer.

83. (New) An optical cable comprising at least one tubular element of polymeric material and at least one transmission element housed within said tubular element, wherein said polymeric material is made from a polymeric composition comprising:

(a) at least one olefin polymer;

(b) at least one inorganic filler; and

(c) at least one olefin polymer including at least one functional group;

wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 3 parts by weight to

about 10 parts by weight with respect to 100 parts by weight of the olefin polymer (a), and

wherein said polymeric material has an elongation at break of about 30% to about 80%.

84. (New) The optical cable according to claim 83, wherein said tubular element is a buffer tube housing said at least one transmission element and wherein said buffer tube is defined by a peripheral wall having a thickness lower than about 0.5 mm.

85. (New) The optical cable according to claim 83, wherein said polymeric material has an ultimate tensile strength lower than about 12 MPa.

86. (New) The optical cable according to claim 83, wherein the olefin polymer (a) is selected from semi-crystalline and crystalline α-olefin polymers including homopolymers, copolymers, terpolymers, and mixtures thereof, containing one or more monomeric units.

87. (New) The optical cable according to claim 83, wherein the inorganic filler (b) is selected from hydroxides, hydrated oxides, salts and hydrated salts of metals, and mixtures thereof.

88. (New) The optical cable according to claims 83, wherein the olefin polymer including at least one functional group (c) is selected from:

(c_1) at least one terpolymer of at least one α-olefin, at least one acrylic acid ester, and at least one α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives, anhydrides, metal salts, imides, esters, or at least one glycidyl acrylate;

(c_2) at least one terpolymer of ethylene, at least one α,β-olefinically unsaturated dicarboxylic acid anhydride, and at least one vinyl ester of a saturated carboxylic acid; and

(c_3) at least one olefin polymer grafted with at least one ethylenically unsaturated monomer.

89. (New) An optical cable comprising at least one tubular element of polymeric material and at least one transmission element housed within said tubular element, wherein said polymeric material is made from a polymeric composition comprising:

(a) at least one olefin polymer;

(b) at least one inorganic filler selected from hydroxides, hydrated oxides, salts or hydrated salts of metals, and mixtures thereof; and

(c) at least one olefin polymer including at least one functional group;

wherein the inorganic filler (b) is present in the polymeric composition in an amount of about 75 parts by weight to about 150 parts by weight with respect to 100 parts by weight of the olefin polymer (a), and

wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 3 parts by weight to about 10 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

90. (New) The optical cable according to claim 89, wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 5 parts by weight to about 8 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

91. (New) The optical cable according to claim 89, wherein said polymeric material has an ultimate tensile strength lower than about 12 MPa.

92. (New) The optical cable according to claim 89, wherein said polymeric material has an elongation at break lower than about 100%.

93. (New) The optical cable according to claim 89, wherein the olefin polymer (a) is selected from semi-crystalline and crystalline α-olefin polymers including homopolymers, copolymers, terpolymers, and mixtures thereof, containing one or more monomeric units.

94. (New) The optical cable according to claim 93, wherein the α-olefin polymers contain from 2 to about 20 carbon atoms.

95. (New) The optical cable according to claim 93, wherein the olefin polymer (a) is selected from low density polyethylene (LDPE), high density polyethylene (HDPE), linear low density polyethylene (LLDPE), ultra low density polyethylene (ULDPE), polypropylene, isotactic polypropylene, high and low density poly-1-butene, poly-4-methyl-1-pentene, ultra-low-molecular weight polyethylene, ethylene-based ionomers, poly-4-methyl-1-pentene, ethylene propylene copolymers, ethylene-propylene-diene copolymers (EPDM), copolymer of ethylene and/or propylene with other copolymerizable monomers, ethylene-1-butylene copolymer, ethylene-vinyl acrylate copolymer, ethylene-methyl acrylate copolymer, ethylene-butyl acrylate copolymer, ethylene-ethyl acetate copolymer, ethylene-vinyl acetate copolymer, propylene-4-methyl-1-pentene copolymer, ethylene-vinyl alcohol copolymer, ethylene acrylic elastomers, ethylene-methyl acrylate-acrylic acid terpolymers, and mixtures thereof.

96. (New) The optical cable according to claim 89, wherein the inorganic filler (b) is selected from magnesium hydroxide, aluminum hydroxide, aluminum oxide, alumina trihydrate, magnesium carbonate hydrate, magnesium carbonate, magnesium calcium carbonate hydrate, magnesium calcium carbonate, and mixtures thereof.

97. (New) The optical cable according to claims 89, wherein the inorganic filler (b) is in the form of coated particles.

98. (New) The optical cable according to claim 97, wherein the inorganic filler (b) is coated with saturated or unsaturated fatty acids containing from 8 to 24 carbon atoms, or metal salts thereof.

99. (New) The optical cable according to claims 89, wherein the olefin polymer including at least one functional group (c) is selected from:

(c_1) at least one terpolymer of at least one α-olefin, at least one acrylic acid ester, and at least one α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives, anhydrides, metal salts, imides, esters, or at least one glycidyl acrylate;

(c_2) at least one terpolymer of ethylene, at least one α,β-olefinically unsaturated dicarboxylic acid anhydride, and at least one vinyl ester of a saturated carboxylic acid; and

(c_3) at least one olefin polymer grafted with at least one ethylenically unsaturated monomer.

100. (New) The optical cable according to claim 99, wherein the terpolymer (c_1) comprises about 50% by weight to about 99% by weight of at least one α-olefin, about 0.5% by weight to about 40% by weight of at least one acrylic acid ester, and about

0.3% by weight to about 10% by weight of at least one dicarboxylic acid reagent, or of at least one glycidyl acrylate.

101. (New) The optical cable according to claim 99, wherein in the terpolymer (c_1), the α-olefin is selected from α-olefins containing from 2 to about 20 carbon atoms.

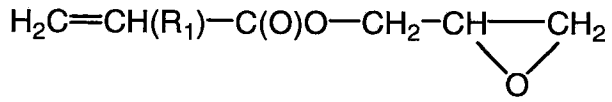
102. (New) The optical cable according to claim 99, wherein in the terpolymer (c_1) the acrylic acid ester is selected from compounds having the following formula:

CH2=C (R) COOR′

wherein R represents hydrogen, or a lower alkyl group containing from 1 to 4 carbon atoms, methyl or ethyl, and R′ represents a lower alkyl group having from 1 to 6 carbon atoms.

103. (New) The optical cable according to claim 99, wherein in the terpolymer (c_1), the α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives are selected from maleic acid, maleic anhydride, fumaric acid, mesaconic acid, itaconic acid, citraconic acid, itaconic anhydride, citraconic anhydride, monomethyl maleate, monosodium maleate, and mixtures thereof.

104. (New) The optical cable according to claim 99, wherein in the terpolymer (c_1), the glycidyl acrylate is selected from compounds having the following formula:



wherein R_1 represents hydrogen or a lower alkyl group containing from 1 to 6 carbon atoms.

105. (New) The optical cable according to claim 99, wherein the terpolymer (c_1) is selected from ethylene-methyl acrylate-maleic anhydride, ethylene-ethyl acrylate-

maleic anhydride, ethylene-butyl acrylate-maleic anhydride, propylene-methyl acrylate-maleic anhydride, propylene-ethyl acrylate-maleic anhydride, ethylene-methyl acrylate-glycidyl methacrylate, ethylene-methyl acrylate-glycidyl acrylate, and mixtures thereof.

106. (New) The optical cable according to claim 99, wherein in the terpolymer (c_2), the α,β-olefinically unsaturated dicarboxylic acid anhydride is selected from citraconic anhydride, itaconic anhydride, tetrahydrophthalic anhydride, maleic anhydride, and mixtures thereof.

107. (New) The optical cable according to claim 99, wherein in the terpolymer (c_2), the vinyl ester of a saturated carboxylic acid is selected from vinyl esters of a saturated carboxylic acid containing from 2 to 6 carbon atoms.

108. (New) The optical cable according to claim 106, wherein the terpolymer (c_2) is ethylene-vinyl acetate-maleic anhydride.

109. (New) The optical cable according to claim 99, wherein in the olefin polymer grafted with at least one ethylenically unsaturated monomer (c_3), the olefin polymer is selected from homopolymers of ethylene, homopolymers of propylene, copolymers of ethylene and propylene, terpolymers of ethylene, terpolymers of propylene, terpolymers of dienes (EPDM), copolymers of ethylene with at least one C_3-C_{10} hydrocarbon α-olefin, and copolymers of ethylene and vinyl acetate, alkyl acrylate or alkyl methacrylate.

110. (New) The optical cable according to claim 109, wherein the ethylenically unsaturated monomer is selected from ethylenically unsaturated carboxylic acids, derivatives thereof, ethylenically unsaturated carboxylic acid anhydrides, and mixtures thereof.

111. (New) The optical cable according to claim 110, wherein the carboxylic acids are selected from acrylic acid, methacrylic acid, maleic acid, fumaric acid, itaconic acid, crotonic acid, and mixtures thereof.

112. (New) The optical cable according to claim 110, wherein the anhydrides are selected from itaconic anhydride, maleic anhydride, substituted maleic anhydride, nadic methyl anhydride, tetrahydrophthalic anhydride, and mixtures thereof.

113. (New) The optical cable according to claim 110, wherein the unsaturated carboxylic acid derivatives are selected from salts, amides, imides, esters, mono- and disodium maleate, acrylamide, maleimide, glycidyl methacrylate, dimethyl fumarate, and mixtures thereof.

114. (New) An optical cable comprising at least one tubular element of polymeric material and at least one transmission element housed within said tubular element, wherein said polymeric material is made from a polymeric composition comprising:

(a) at least one olefin polymer;

(b) at least one inorganic filler; and

(c) at least one olefin polymer including at least one functional group selected from:

(c_1) at least one terpolymer of at least one α-olefin, at least one acrylic acid ester, and at least one α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives, anhydrides, metal salts, imides, esters, or at least one glycidyl acrylate; and

(c_2) at least one terpolymer of ethylene, at least one α,β-olefinically unsaturated dicarboxylic acid anhydride, and at least one vinyl ester of a saturated carboxylic acid; and

wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 3 parts by weight to about 10 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

115. (New) The optical cable according to claim 114, wherein said at least one olefin polymer including at least one functional group (c) is present in the polymeric composition in an amount of about 5 parts by weight to about 8 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

116. (New) The optical cable according to claim 114, wherein said polymeric material has an ultimate tensile strength lower than about 12 MPa.

117. (New) The optical cable according to claim 114, wherein said polymeric material has an elongation at break lower than about 100%.

118. (New) The optical cable according to claim 114, wherein the olefin polymer (a) is selected from semi-crystalline and crystalline α-olefin polymers including homopolymers, copolymers, terpolymers, and mixtures thereof, containing one or more monomeric units.

119. (New) The optical cable according to claim 118, wherein the α-olefin polymers contain from 2 to about 20 carbon atoms.

120. (New) The optical cable according to claims 118, wherein the olefin polymer (a) is selected from low density polyethylene (LDPE), high density polyethylene (HDPE), linear low density polyethylene (LLDPE), ultra low density polyethylene

(ULDPE), polypropylene, isotactic polypropylene, high and low density poly-1-butene, poly-4-methyl-1-pentene, ultra-low-molecular weight polyethylene, ethylene-based ionomers, poly-4-methyl-1-pentene, ethylene propylene copolymers, ethylene-propylene-diene copolymers (EPDM), copolymer of ethylene and/or propylene with other copolymerizable monomers, ethylene-1-butylene copolymer, ethylene-vinyl acrylate copolymer, ethylene-methyl acrylate copolymer, ethylene-butyl acrylate copolymer, ethylene-ethyl acetate copolymer, ethylene-vinyl acetate copolymer, propylene-4-methyl-1-pentene copolymer, ethylene-vinyl alcohol copolymer, ethylene acrylic elastomers, ethylene-methyl acrylate-acrylic acid terpolymers, and mixtures thereof.

121. (New) The optical cable according to claim 114, wherein the inorganic filler (b) is selected from hydroxides, hydrated oxides, salts and hydrated salts of metals, and mixtures thereof.

122. (New) The optical cable according to claim 121, wherein the inorganic filler (b) is selected from magnesium hydroxide, aluminum hydroxide, aluminum oxide, alumina trihydrate, magnesium carbonate hydrate, magnesium carbonate, magnesium calcium carbonate hydrate, magnesium calcium carbonate, and mixtures thereof.

123. (New) The optical cable according to claim 121, wherein the inorganic filler (b) is in the form of coated particles.

124. (New) The optical cable according to claim 123, wherein the inorganic filler (b) is coated with saturated or unsaturated fatty acids containing from 8 to 24 carbon atoms, and metal salts thereof.

125. (New) The optical cable according to claim 121, wherein the inorganic filler (b) is present in the polymeric composition in an amount of about 40 parts by weight to about 200 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

126. (New) The optical cable according to claim 125, wherein the inorganic filler (b) is present in the polymeric composition in an amount of about 75 parts by weight to about 150 parts by weight with respect to 100 parts by weight of the olefin polymer (a).

127. (New) The optical cable according to claim 114, wherein the terpolymer (c_1) comprises about 50% by weight to about 99% by weight of at least one α-olefin, about 0.5% by weight to about 40% by weight of at least one acrylic acid ester, and about 0.3% by weight to about 10% by weight of at least one dicarboxylic acid reagent, or of at least one glycidyl acrylate.

128. (New) The optical cable according to claim 114, wherein in the terpolymer (c_1), the α-olefin is selected from α-olefins containing from 2 to about 20 carbon atoms.

129. (New) The optical cable according to claim 114, wherein in the terpolymer (c_1), the acrylic acid ester is selected from compounds having the following formula:

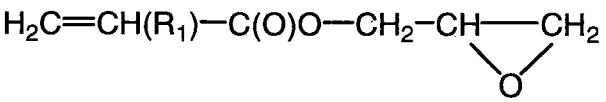
CH2=C (R) COOR′

wherein R represents hydrogen, or a lower alkyl group containing from 1 to 4 carbon atoms, methyl or ethyl, and R′ represents a lower alkyl group having from 1 to 6 carbon atoms.

130. (New) The optical cable according to claim 114, wherein in the terpolymer (c_1), the α,β-olefinically unsaturated dicarboxylic acid reagent or its derivatives are selected from maleic acid, maleic anhydride, fumaric acid, mesaconic acid, itaconic

acid, citraconic acid, itaconic anhydride, citraconic anhydride, monomethyl maleate, monosodium maleate, and mixtures thereof.

131. (New) The optical cable according to claim 114, wherein in the terpolymer (c_1), the glycidyl acrylate is selected from compounds having the following formula:



wherein R_1 represents hydrogen or a lower alkyl group containing from 1 to 6 carbon atoms.

132. (New) The optical cable according to claim 114, wherein the terpolymer (c_1) is selected from ethylene-methyl acrylate-maleic anhydride, ethylene-ethyl acrylate-maleic anhydride, ethylene-butyl acrylate-maleic anhydride, propylene-methyl acrylate-maleic anhydride, propylene-ethyl acrylate-maleic anhydride, ethylene-methyl acrylate-glycidyl methacrylate, ethylene-methyl acrylate-glycidyl acrylate, and mixtures thereof.

133. (New) The optical cable according to claim 114, wherein in the terpolymer (c_2), the α,β-olefinically unsaturated dicarboxylic acid anhydride is selected from citraconic anhydride, itaconic anhydride, tetrahydrophthalic anhydride, maleic anhydride, and mixtures thereof.

134. (New) The optical cable according to claim 114, wherein in the terpolymer (c_2), the vinyl ester of a saturated carboxylic acid is selected from vinyl esters of a saturated carboxylic acid containing from 2 to 6 carbon atoms.

135. (New) The optical cable according to claim 133, wherein the terpolymer (c_2) is ethylene-vinyl acetate-maleic anhydride.